

NOTES, ABSTRACTS, AND REVIEWS.

DEATH OF PROF. FRANK WALDO.

Prof. Frank Waldo, meteorologist and educational expert, died at his home in Boston, Mass., on May 7, 1920. Prof. Waldo was born at Cincinnati, Ohio, November 4, 1857, and graduated from Harvard University in 1884. He was employed as computer and professor in the meteorological branch of the U. S. Signal Corps from 1881 to 1887, and as special agent of the U. S. Weather Bureau in 1890. He was engaged in cattle ranching 1896-1902; editorial work, 1902-1907; was employed as an expert in industrial education by the Massachusetts Commission on Industrial Education, 1907-1911; was a member of the Austrian and German meteorological and philosophical societies and of the National Society for the Promotion of Industrial Education; also of the Authors and Century clubs of Boston. Was the author of *Modern Meteorology*, 1893; *Elementary Meteorology for Schools and Colleges*, 1896; and numerous scientific memoirs, reports on industrial education, and articles on popular science.—*H. E. Williams.*

PRINCIPAL METEOROLOGICAL WRITINGS OF FRANK WALDO.

- Mathematical lectures at Fort Myer.** Ann. Rep. Chief Signal Officer. Washington, 1882. Part 1, Appendix No. 6, pp. 143-172.
Reprint of "Motions of fluids and solids on the earth's surface," by Wm. Ferrel. With notes by Frank Waldo. Prof. papers U. S. Signal Service. No. 8. Washington, 1882. 51 p.
On Mr. Heath's criticism of Ferrel's theory of atmospheric currents. Phil. Mag., London, vol. 16, 1883. pp. 264-267.
Study of meteorology in the higher schools of Germany, Switzerland, and Austria. U. S. Signal Service notes, No. 8. Washington, 1883. 9 p.
Application of Wright's apparatus for distilling to the filling of barometer tubes. Amer. J. Sc., New Haven, v. 27, 1884. pp. 18-19.
Russian meteorological service. Science, New York, v. 3, 1884. pp. 117-121.
Comparisons of Signal Service barometers with standard barometers in Europe and the United States. U. S. MONTHLY WEATHER REVIEW, Apr., 1887. pp. 119-121.
Results of Anemometer observations at sea. U. S. MONTHLY WEATHER REVIEW, Jan., 1887. p. 31.
Notes on meteorological observations in Europe. Fort Myer lectures, Jan., 1887. MSS. 87 p.
Mittlere Windgeschwindigkeiten in den Vereinigten Staaten. Met'l. Zeitschrift, Berlin, v. 5, 1888. pp. 285-296.
Translation of Wilhelm Schöch's "Representation of the mean yearly temperature of a place as a function of its general longitude." Ann Arbor. 1891. 22 p.
Modern Meteorology: an outline of the growth and present condition of some of its phases. London. 1893. xxiii, 460 p.
Wind as motive power in the United States. Review of Reviews, N. Y., v. 12, Sept., 1895.
Elementary meteorology for high schools and colleges. N. Y., 1896. 373 p.
Importance of the Mount Weather Observatory. Boston Evening Transcript, August 19, 1905.

—*C. F. Talman.*

THE RETIREMENT OF SIR NAPIER SHAW.

[Reprinted from *Nature*, Apr. 1, 1920, pp. 144-145.]

The impending retirement of Sir Napier Shaw, who has been Director of the Meteorological Office since 1905, and as president of the International Meteorological Committee, occupies a unique position, marks an epoch in the history of British meteorology. Trained primarily as a physicist, Sir Napier has been able to approach meteorological problems in a scientific spirit. His academic experience brought him into contact with younger men, and by the encouragement he extended to them he raised the level of his subject. As a consequence, there are at the present moment a greater number of men in the

British Empire capable of dealing with intricate meteorological problems than in any other part of the world. A heavy responsibility rests on the authorities on whom the duty of nominating Sir Napier's successor falls. When the Meteorological Office was taken over by the Air Ministry last year the change was looked upon with grave misgivings. The near future will show whether the anxiety then felt then regarding the wisdom of a step that was taken against the advice of all competent authorities is to be relieved or intensified. It would be an irretrievable calamity if administrative rather than scientific qualifications were to determine the choice. Unless the whole future of British meteorology is to be jeopardized, the Director of the Office must be a man of high scientific standing who will maintain the leading place which the Office now takes among the nations of the world. For the credit of the nation and in the interests of science we trust that the new Director will be a worthy successor of the one who has given so much scientific honor to the post.

RETIREMENT OF H. HARRIES.

[Reprinted from *Monthly Meteorological Charts of the North Atlantic Ocean*, June, 1920.]

Mr. H. Harries retired on 31st of March, 1920, after 45 years' service at the Meteorological Office.

Serving first under Capt. Toynbee, then under Capt. Campbell Hepworth, Mr. Harries eventually took charge of the Marine Division at the latter officer's death in February, 1919, and so had the unique experience of being the only landsman who has ever acted as Marine Superintendent at the Meteorological Office.

He realized that to deal successfully with the many problems connected with marine meteorology, it was desirable to have first-hand experience and knowledge of the sea, and to understand sailors. With this in view he made several voyages across the Atlantic and to the Mediterranean. He was for a time transferred to the Forecast Division in order that practical knowledge of Atlantic meteorology should be used in forecasting.

Amongst the work done by Mr. Harries, which is of special interest to seamen, was the drawing of the *Monthly North Atlantic Meteorological Charts* during the first two years of their issue. He designed and prepared maps of hourly tidal streams round the British Isles, which were first published by the Admiralty in the form of a pocket atlas.

Mr. Harries has recently contributed a series of articles on North Atlantic synoptic meteorology on the October, 1919, to January, 1920, *Monthly North Atlantic Meteorological Charts*, and just before retiring prepared an article on cyclones of the Arabian Sea and Bay of Bengal, in which he shows how the seaman may be misled by following the usual rules which are applicable to these storms in other parts of the Tropics; May, 1920, *Indian Ocean Chart*.

THE METEOROLOGICAL MAGAZINE.

[Reprinted from *Nature* (London), Mar. 18, 1920, p. 83.]

The Meteorological Magazine, an official publication of the Meteorological Office, was first issued under its new title about the middle of February. The journal incorporates Symons's *Meteorological Magazine* and the *Meteorological Office Circular*. For convenience in reference, the serial numbers of Symons's *Meteorological Maga-*